What is claimed is:

1. A composition comprising a peptide having the amino acid sequence $X_1X_2X_3X_4X_5X_6X_7X_8$, wherein:

X_1 is hydrogen, an amino-terminal blocking group, or one to twenty amino acid residues;

X_2 is an amino acid selected from the group consisting of D, E, H, K, and R;

X_3 is an amino acid selected from the group consisting of E and D;

X_4 is an amino acid selected from the group consisting of I, L, and V;

X_5 is an amino acid selected from the group consisting of I, L, and V;

X_6 is an amino acid selected from the group consisting of M;

X_7 is an amino acid selected from the group consisting of D, E, H, K, and R; and

X_8 is hydrogen, a carboxyl-terminal blocking group, or one to twenty amino acid residues.

2. The composition of claim 1, wherein:

X_1 is hydrogen or an amino-terminal blocking group;

X_2 is an amino acid selected from the group consisting of D, E, and R;

X_3 is an amino acid selected from the group consisting of D and E;

X_4 is I;

X_5 is I;

X_6 is M;

X_7 is an amino acid selected from the group consisting of D and E; and

X_8 is hydrogen or a carboxyl-terminal blocking group.

3. The composition of claim 1, wherein:

X_1 is hydrogen;

X_2 is E;

X_3 is E;

X_4 is I;

X_5 is I;

X_6 is M;

X_7 is D; and

X_8 is hydrogen.

4. The composition of claim 1, further comprising a pharmaceutically acceptable carrier.

5. A method of affecting a biological process characterized by abnormal cell migration through a physiological barrier, said method comprising administering the composition of claim 1 to a mammal experiencing said biological process in an amount to affect said biological process.

6. The method of claim 5, wherein said biological process is selected from the group consisting of angiogenesis, organogenesis, ovulation, inflammation, cancer, tumor cell invasion and metastasis, and atherosclerosis.

7. The method of claim 5, wherein said mammal is a human.

8. A method of inhibiting PAI-1-dependent adhesion of a cell to a tissue of a mammal, said method comprising administering to said tissue the composition of claim 1 in an amount to inhibit adhesion of said cell to said tissue.

9. The method of claim 8, wherein said tissue is *in vivo* in said mammal.

10. The method of claim 8, wherein said mammal is a human.

11. A method of promoting clearance of scuPA from the surface of a mammalian cell, said method comprising administering the composition of claim 1 to said cell in an amount to promote clearance of said scuPA from said cell.

12. The method of claim 11, wherein said cell is a human cell.

13. The method of claim 12, wherein said composition is administered *in vivo* in said human.

14. A method of impeding pathological migration of a cell in a mammal, said method comprising administering to said mammal the composition of claim 1 in an amount effective to impede pathological migration of said cell.

15. The method of claim 14, wherein said composition is administered to said mammal at the site of a tumor in said mammal.

16. The method of claim 14, wherein said mammal is a human.

17. A method of inhibiting PAI-1 activity in a tissue of a mammal, said method comprising administering to said tissue the composition of claim 1 in an amount effective to inhibit PAI-1 activity in said tissue.

18. The method of claim 17, wherein said mammal is a human.

19. The method of claim 18, wherein said composition is administered *in vivo* in said human.

20. A kit comprising a peptide having the amino acid sequence $X_1X_2X_3X_4X_5X_6X_7X_8$, wherein:

X_1 is hydrogen, an amino-terminal blocking group, or one to twenty amino acid residues;

X_2 is an amino acid selected from the group consisting of D, E, H, K, and R;

X_3 is an amino acid selected from the group consisting of E and D;

X_4 is an amino acid selected from the group consisting of I, L, and V;

X_5 is an amino acid selected from the group consisting of I, L, and V;

X_6 is an amino acid selected from the group consisting of M;

X_7 is an amino acid selected from the group consisting of D, E, H, K, and R; and

X_8 is hydrogen, a carboxyl-terminal blocking group, or one to twenty amino acid residues, and an instructional material for using said kit.

21. A composition comprising a combination of a peptide having the amino acid sequence $X_1X_2X_3X_4X_5X_6X_7X_8$, wherein:

X_1 is hydrogen, an amino-terminal blocking group, or one to twenty amino acid residues;

X_2 is an amino acid selected from the group consisting of D, E, H, K, and R;

X_3 is an amino acid selected from the group consisting of E and D;

X_4 is an amino acid selected from the group consisting of I, L, and V;

X_5 is an amino acid selected from the group consisting of I, L, and V;

X_6 is an amino acid selected from the group consisting of M;

X_7 is an amino acid selected from the group consisting of D, E, H, K, and R; and

X_8 is hydrogen, a carboxyl-terminal blocking group, or one to twenty amino acid residues, and

a thrombolytic agent.

22. The composition of claim 21, wherein said thrombolytic agent is selected from the group consisting of tissue plasminogen activator, streptokinase, urokinase, the streptokinase derivative and staphylokinase.

23. A composition comprising a combination of a peptide having the amino acid sequence $X_1X_2X_3X_4X_5X_6X_7X_8$, wherein:

X_1 is hydrogen, an amino-terminal blocking group, or one to twenty amino acid residues;

X_2 is an amino acid selected from the group consisting of D, E, H, K, and R;

X_3 is an amino acid selected from the group consisting of E and D;

X_4 is an amino acid selected from the group consisting of I, L, and V;

X_5 is an amino acid selected from the group consisting of I, L, and V;

X_6 is an amino acid selected from the group consisting of M;

X_7 is an amino acid selected from the group consisting of D, E, H, K, and R; and

X_8 is hydrogen, a carboxyl-terminal blocking group, or one to twenty amino acid residues, and

an anti-coagulating agent.

24. The composition of claim 23, wherein said anti-coagulating agent is selected from the group consisting of an agent which inhibits platelet function, and agent which inhibits the activity of thrombin, and agent which promotes the activity of activated protein kinase C, an anti-thrombin III agent, and a tissue factor pathway inhibitor.